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## EUROPEAN PATENT APPLICATION

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⑯ Int. Cl.: G 06 K 7/08

⑯ Date of filing: 03.06.86

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⑯ Applicant: Bertenshaw, Phillip Hall, 18 Lower Fold, Marple Bridge Cheshire (GB)  
Applicant: Jones, John, 82 Guywood Lane Romiley, Stockport Greater Manchester (GB)

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⑯ Inventor: Bertenshaw, Phillip Hall, 18 Lower Fold, Marple Bridge Cheshire (GB)  
Inventor: Jones, John, 82 Guywood Lane Romiley, Stockport Greater Manchester (GB)

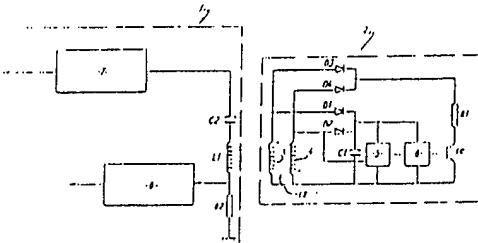
⑯ Designated Contracting States: AT BE CH DE FR GB IT LI LU NL SE

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⑯ Representative: Quest, Barry et al, M'CAW & CO. 41-51 Royal Exchange Cross Street, Manchester M27BD (GB)

### ⑯ Identification system.

⑯ An identification system comprises reading equipment (1) and an identification device (2) which can be inductively coupled via respective coils (L1, L2). The identification device (2) does not contain an internal battery but is energised by the reading equipment via the coupled coils (L1, L2). A control element such as a load resistor (R1) is provided in the identification device (2) and acts to modify the coupling of the coils (L1, L2) in a manner which can be interpreted by a reading circuit (8) in the reading equipment (1). The load resistor (R1) may be switched off and on by a transistor (TR) in a manner determined by coded digital signals derived from a data store (6).



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## EUROPEAN SEARCH REPORT

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
X	US-A-4 517 563 (DIAMANT) * Figure 1; column 2, line 16 - column 3, line 11 *	1,3-10	G 06 K 7/08
X	---	1-4,6-10	
X	AU-A- 515 616 (NEDERLANDSCHE APPARATENFABRIEK NEDAP) * Figures 1,2; claim 1; page 4, line 3 - page 7, line 9; page 8, line 15 - page 9, line 17 *		
X	---	1,3-8,10	
X	DE-A-3 242 551 (GÖTTING) * Figures 1,2; page 21, line 11 - page 22, line 23 *		
P,X	---	1-10	
P,X	US-A-4 546 241 (WALTON) * Figure 1; column 2, line 8 - column 5, line 62 *		TECHNICAL FIELDS SEARCHED (Int. Cl.4)
	-----		G 06 K G 07 C
<p>The present search report has been drawn up for all claims</p>			
Place of search	Date of completion of the search	Examiner	
THE HAGUE	06-02-1987	GYSEN L.A.D.	
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone	T : theory or principle underlying the invention		
Y : particularly relevant if combined with another document of the same category	E : earlier patent document, but published on, or after the filing date		
A : technological background	D : document cited in the application		
O : non-written disclosure	L : document cited for other reasons		
P : intermediate document	& : member of the same patent family, corresponding document		

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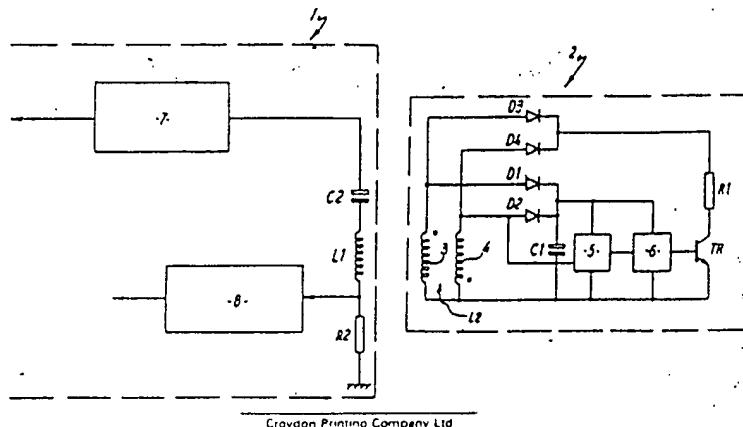
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18 Lower Fold  
Marple Bridge Cheshire(GB)

72 Inventor: Jones, John  
82 Guywood Lane Romiley  
Stockport Greater Manchester(GB)

74 Representative: Quest, Barry et al.  
M'CAW & CO. 41-51 Royal Exchange Cross Street  
Manchester M2 7BD(GB)

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- 1 -

IDENTIFICATION SYSTEM

This invention relates to an identification system of the kind comprising a personal identification device, such as an identification card, which can be verified by automatic reading equipment for example 5. to provide access to security premises or for other purposes.

Identification cards are known which have identifying data which can be read with a magnetic reader. There are also cards which have data which can be read with a bar-code reader. In each case there is the problem that the reading equipment operates with a wiping or scanning 10. action utilising a small gap between the card and reader whereby the problem arises that identification of data can be readily disturbed by vandalism of the equipment or accumulation of dirt on the card or within the equipment. Infra-red reading equipment similarly is subject to disturbances in so far as it is necessary to insert an identification 15. card into an aperture in which the card is maintained accurately in predetermined disposition relative to the reader.

Transponder proximity card reading systems are less prone to disturbance and give good hand-free operation, but these can be inconvenient and expensive in so far as a battery power supply is 20. provided within the identification card and sophisticated control circuitry is required to ensure adequate battery life. There are proximity reading systems which do not require a battery power source but these rely on the use of complex and expensive reading equipment.

An object of the present invention is to provide a simple, convenient 25. and inexpensive identification system which is reliable in operation and utilises an identification device which need not be provided with an internal battery power source.